

We are a young, innovative university located in the heart of the Ruhr metropolitan region. Recognized for excellence in research and teaching, we think in terms of possibilities rather than limitations and develop ideas with a future. We embrace diversity, support individual potential, and are committed to educational equity worthy of the name.

The **University of Duisburg-Essen (UDE)** is seeking, for the **Essen campus** in the Faculty of **Chemistry**, in the field of Environmental Microbiology and Biotechnology, Department of **Molecular Enzyme Technology and Biochemistry**, a

PhD Candidate (f/m/d)
(Salary equivalent to 13 TV-L, 65%)

The Faculty of Chemistry is one of the largest chemistry faculties in Germany and offers three degree programs under one roof: Chemistry, Water Science, and Chemistry Education.

Your Main Responsibilities:

Participation in the DFG-funded research project **SweetSaci**, which investigates various aspects of **exopolysaccharide synthesis** and **protein glycosylation** in the archaeal model organism *Sulfolobus acidocaldarius*.

The project focuses particularly on the biosynthetic pathway of exopolysaccharides, sugar translocation across the cell membrane, and potential interactions between polysaccharide synthesis and protein glycosylation.

Your Tasks:

You will be responsible for research activities within the project, which are expected to include the following:

- Cloning, expression, and characterization of enzymes and transporters involved in exopolysaccharide synthesis
- Generation of deletion mutants in *Sulfolobus acidocaldarius*
- Characterization of wild-type and mutant biofilms of *S. acidocaldarius*, e.g., using photometric, microscopic, extractive, and biochemical methods
- Active participation in seminars and conferences, as well as close collegial collaboration

Your Profile:

- Completed university degree (at least 8 semesters) in Biochemistry, Microbiology, Water Science, or a related field
- Goal-oriented, structured, and independent working style
- Strong presentation and communication skills
- Excellent command of English
- Ability to work effectively in an international team
- Prior scientific experience in microscopy (e.g., CLSM), molecular biology methods, or enzyme characterization is desirable

What We Offer:

- A varied and diverse range of responsibilities in a dynamic work environment with international exchange
- A position of responsibility with room for your own ideas and initiative
- A pleasant working atmosphere within a motivated and supportive team
- Comprehensive professional development and training opportunities, with individualized onboarding
- Family-friendly policies, including childcare support services
- Support and advice for those with family caregiving responsibilities
- Excellent public transport connections and free parking facilities
- Attractive sports and health programs (university sports)
- Possibility to work from home

Start date: As soon as possible

Contract duration: 36 months (corresponding to the project duration)

Working hours: 65% of a full-time position

Application deadline: May 22, 2025

Please send your application, including the usual supporting documents, quoting the reference number **206-25**, to **Prof. Dr. Bettina Siebers**, University of Duisburg-Essen, Faculty of Chemistry, Molecular Enzyme Technology and Biochemistry, 45117 Essen, Germany, Phone (Secretariat): +49 201 183 6602, Email (Secretariat): clarissa.gruendler@uni-due.de

For more information about the Faculty and the research group, please visit:

<https://www.uni-due.de/chemie/>

https://www.uni-due.de/umb/enzym_home.shtml

The University of Duisburg-Essen is committed to promoting diversity among its members (see <https://www.uni-due.de/diversity>).

The university aims to increase the proportion of women in academic positions and therefore explicitly encourages qualified women to apply. Women will be given preferential consideration in accordance with the provisions of the **State Equal Opportunities Act of North Rhine-Westphalia (LGG NRW)** if they are equally qualified.

Applications from individuals with disabilities or those with equivalent status in accordance with § 2 (3) SGB IX are strongly encouraged.

